2018-2019 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT

ASH IMPOUNDMENT
IATAN GENERATING STATION
IATAN, MISSOURI

Presented To:

Kansas City Power & Light Company

Presented By:

SCS ENGINEERS
8575 West 110th Street, Suite 100
Overland Park, Kansas 66210
(913) 681-0030

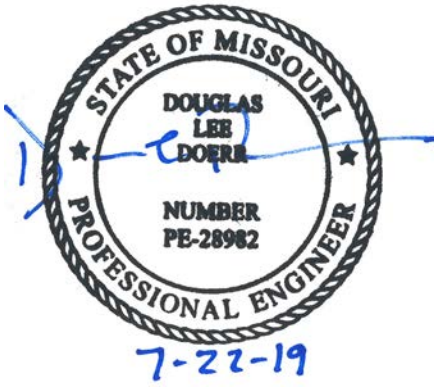
July 22, 2019
File Number 27217413.10

CERTIFICATIONS

I, John R. Rockhold, being a qualified groundwater scientist and Registered Geologist in the State of Missouri, do hereby certify that the 2018-2019 Annual Groundwater Monitoring and Corrective Action Report for the Ash Impoundment at the Iatan Generating Station was prepared by me or under my direct supervision and fulfills the requirements of 40 CFR 257.90(e).

John R. Rockhold, R.G.
SCS Engineers

I, Douglas L. Doerr, being a qualified licensed Professional Engineer in the State of Missouri, do hereby certify that the 2018-2019 Annual Groundwater Monitoring and Corrective Action Report for the Ash Impoundment at the Iatan Generating Station was prepared by me or under my direct supervision and fulfills the requirements of 40 CFR 257.90(e).



Douglas L. Doerr, P.E.
SCS Engineers

Revision Number	Revision Date	Revision Section	Summary of Revisions

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Appendices

1 INTRODUCTION

This 2018-2019 Annual Groundwater Monitoring and Corrective Action Report was prepared to support compliance with the groundwater monitoring requirements of the "Coal Combustion Residuals (CCR) Final Rule" (Rule) published by the United States Environmental Protection Agency (USEPA) in the *Hazardous and Solid Waste Management System; Disposal of Coal Combustion Residuals from Electric Utilities; Final Rule*, dated April 17, 2015 (USEPA, 2015), update published August 5, 2016 ("Extension Rule) to provide an extension of compliance deadlines for certain inactive surface impoundments. The Ash Impoundment is classified as an "inactive" CCR unit and is therefore regulated by the August 5, 2016 update to the Rule subject to the new 40 CFR 257.100(e). Owners and operators of inactive CCR surface impoundments subject to the provisions of the new 40 CFR 257.100(e)(5)(ii) are required to prepare an annual groundwater monitoring and corrective action report no later than August 1, 2019 per 40 CFR 257.90(e).

Specifically, this report was prepared to fulfill the requirements of 40 CFR 257.90(e). Changes to the text of 40 CFR 257.90(e) to indicate the update subject to the new 40 CFR 257.100(e) are shown in [brackets] and specific reference to active CCR unit or expansions have been deleted. The applicable sections of the Rule are provided below in *italics*, followed by applicable information relative to the 2018-2019 Annual Groundwater Monitoring and Corrective Action Report for the Ash Impoundment at the Iatan Generating Station.

2 § 257.90(e) ANNUAL REPORT REQUIREMENTS

Annual groundwater monitoring and corrective action report. *For [inactive] CCR surface impoundments, no later than [August 1, 2019], and annually thereafter, the owner or operator must prepare an annual groundwater monitoring and corrective action report. For [inactive] CCR surface impoundments, the owner or operator must prepare the initial annual groundwater monitoring and corrective action report no later than [August 1] of the year following the calendar year a groundwater monitoring system has been established for such CCR unit as required by this subpart, and annually thereafter. For the preceding calendar year, the annual report must document the status of the groundwater monitoring and corrective action program for the CCR unit, summarize key actions completed, describe any problems encountered, discuss actions to resolve the problems, and project key activities for the upcoming year. For purposes of this section, the owner or operator has prepared the annual report when the report is placed in the facility's operating record as required by § 257.105(h)(1). At a minimum, the annual groundwater monitoring and corrective action report must contain the following information, to the extent available:*

2.1 § 257.90(e)(1) SITE MAP

A map, aerial image, or diagram showing the CCR unit and all background (or upgradient) and downgradient monitoring wells, to include the well identification numbers, that are part of the groundwater monitoring program for the CCR unit;

A site map with an aerial image showing the Ash Impoundment and all background (or upgradient) and downgradient monitoring wells with identification numbers for the Ash Impoundment groundwater monitoring program is provided as **Figure 1** in **Appendix A**.

2.2 § 257.90(e)(2) MONITORING SYSTEM CHANGES

Identification of any monitoring wells that were installed or decommissioned during the preceding year, along with a narrative description of why those actions were taken;

The monitoring wells were installed as part of the CCR groundwater monitoring program for the Ash Impoundment in January 2018 and initially certified on April 16, 2019. However, due to the historic Missouri River flooding that began in March 2019, monitoring well MW-106 was found to have been destroyed in April 2019. SCS Engineers completed an evaluation that concluded this CCR unit groundwater monitoring system meets the requirements of 40 CFR 257.91 without MW-106 and therefore may be certified in accordance with 40 CFR 257.91(f). Therefore, the CCR groundwater monitoring system was re-certified to meet the requirements of 40 CFR 257.91 on May 8, 2019.

2.3 § 257.90(e)(3) SUMMARY OF SAMPLING EVENTS

In addition to all the monitoring data obtained under §§ 257.90 through 257.98, a summary including the number of groundwater samples that were collected for analysis for each background and downgradient well, the dates the samples were collected, and whether the sample was required by the detection monitoring or assessment monitoring programs;

Only detection monitoring was conducted during the reporting period. Background sampling for the detection monitoring program began in February 2018. Samples were analyzed as indicated in **Appendix B**, **Table 1** (Appendix III and Appendix IV Detection Monitoring Results) and **Table 2** (Detection Monitoring Field Measurements). The dates of sample collection and the results of the analyses are also provided in these tables.

2.4 § 257.90(e)(4) MONITORING TRANSITION NARRATIVE

A narrative discussion of any transition between monitoring programs (e.g., the date and circumstances for transitioning from detection monitoring to assessment monitoring in addition to identifying the constituent(s) detected at a statistically significant increase over background levels); and

There was no transition between monitoring programs in 2018-2019. Only detection monitoring was conducted in 2018-2019. Statistical evaluation of the data was still in process as of June 30, 2019.

2.5 § 257.90(e)(5) OTHER REQUIREMENTS

Other information required to be included in the annual report as specified in §§ 257.90 through 257.98.

A summary of potentially required information and the corresponding section of the Rule is provided in the following sections. In addition, the information, if applicable, is provided.

2.5.1 § 257.90(e)

Status of Groundwater Monitoring and Corrective Action Program.

The groundwater monitoring and corrective action program is in detection monitoring.

Summary of Key Actions Completed.

Collection of initial background groundwater quality data was completed and the initial detection monitoring sampling and analysis event was completed on April 29, 2019. The first verification sampling was conducted per the certified statistical method on May 20, 2019.

Description of Any Problems Encountered.

The initial detection monitoring sampling event was scheduled for March 2019; however, the historic flooding of the Missouri River prevented the sampling event until flood waters receded and the sampling event was performed April 29, 2019.

Discussion of Actions to Resolve the Problems.

The initial detection monitoring sampling event was performed April 29, 2019 after the Missouri River flood waters receded.

Projection of Key Activities for the Upcoming Year (2019-2020).

Completion of verification sampling and statistical evaluation of the Spring 2019 detection monitoring data. Semiannual Fall 2019 and Semiannual Spring 2020 groundwater sampling and analysis and, if required, alternative source demonstration(s) .

2.5.2 § 257.94(d)(3)

Demonstration providing the basis for an alternative monitoring frequency for detection monitoring and certification that it meets the requirements of this section.

Not applicable because no alternative monitoring frequency for detection monitoring and certification was pursued.

2.5.3 § 257.94(e)(2)

Demonstration that an alternative source other than the CCR unit caused the statistically significant increase (SSI) over background or that the SSI was caused by an error in sampling, analysis, statistical evaluation, or natural variation in groundwater quality. In addition, certification of the demonstration is to be included in the annual report.

Not applicable because no such demonstration was conducted.

2.5.4 § 257.95(c)(3)

Demonstration providing the basis for an alternative monitoring frequency for assessment monitoring and certification that it meets the requirements of this section.

Not applicable because no such demonstration was conducted.

2.5.5 § 257.95(d)(3)

Include the concentrations of Appendix III and detected Appendix IV constituents from the assessment monitoring, the established background concentrations, and the established groundwater protection standards.

Not applicable because there was no assessment monitoring conducted.

2.5.6 § 257.95(g)(3)(ii)

Demonstration that an alternative source other than the CCR unit caused the contamination, or that the SSI (during assessment monitoring) resulted from an error in sampling, analysis, statistical evaluation, or natural variation in groundwater quality. In addition, certification of the demonstration is to be included in the annual report.

Not applicable because no such demonstration was conducted.

2.5.7 § 257.96(a)

Demonstration of the need for additional time to complete the assessment of corrective measures due to site-specific conditions or circumstances. In addition, certification of the demonstration is to be included in the annual report.

Not applicable because no such demonstration was conducted.

3 GENERAL COMMENTS

This report has been prepared and reviewed under the direction of a qualified groundwater scientist and qualified professional engineer. The information contained in this report is a reflection of the conditions encountered at the Iatan Generating Station at the time of fieldwork. This report includes a review and compilation of the required information and does not reflect any variations of the subsurface, which may occur between sampling locations. Actual subsurface conditions may vary and the extent of such variations may not become evident without further investigation.

Conclusions drawn by others from the result of this work should recognize the limitation of the methods used. Please note that SCS Engineers does not warrant the work of regulatory agencies or other third parties supplying information used in the assimilation of this report. This report is prepared in accordance with generally accepted environmental engineering and geological practices, within the constraints of the client's directives. It is intended for the exclusive use of KCP&L and Westar, Evergy Companies for specific application to the Iatan Generating Station Ash Impoundment. No warranties, express or implied, are intended or made.

APPENDIX A

FIGURES

Figure 1: Site Map

LEGEND:

MW-109 MONITORING WELL

NOTES:

1. HORIZONTAL DATUM: MISSOURI STATE PLANE COORDINATE SYSTEM, WEST ZONE (NAD 83)
2. VERTICAL DATUM: NAVD 88
3. GOOGLE EARTH IMAGE DATED JUNE 10, 2016.
4. MONITOR WELL LOCATIONS ARE APPROXIMATE.
5. * – WELL WAS DESTROYED IN HISTORIC RIVER FLOODING OF MARCH 2019.

400 0 400 800

SCALE FEET

REV.	DATE	CK. BY
1	-	-
2	-	-
3	-	-
4	-	-
5	-	-
6	-	-

SHEET TITLE
SITE MAP
ASH IMPOUNDMENT

PROJECT TITLE
2018-2019 GROUNDWATER MONITORING AND CORRECTIVE ACTIVE REPORT

CLIENT
KANSAS CITY POWER & LIGHT COMPANY
IATAN GENERATING STATION
WESTON, MISSOURI

SCS ENGINEERS
8575 W. 110th St, Ste. 100
Overland Park, Kansas 66210
PH. (913) 681-0030 FAX. (913) 681-0012

PROJ. NO. 27217413.00
DSN. BY: JRR
DWN. BY: MBJ
CHK. BY: JRF
QA/A RVW BY: JRR
PROJ. MGR JRF

CADD FILE:
27217413.00_FIG 1_ASH IMPOUNDMENT.DWG

DATE:
07/22/19

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APPENDIX B

TABLES

Table 1: Appendix III and Appendix IV Detection Monitoring Results

Table 2: Detection Monitoring Field Measurements

Table 1
Ash Impoundment
Appendix III and Appendix IV Detection Monitoring Results
KCP&L Iatan Generating Station

Well Number	Sample Date	Appendix III Constituents							Appendix IV Constituents														
		Boron (mg/L)	Calcium (mg/L)	Chloride (mg/L)	Fluoride (mg/L)	pH (S.U.)	Sulfate (mg/L)	Total Dissolved Solids (mg/L)	Antimony (mg/L)	Arsenic (mg/L)	Barium (mg/L)	Beryllium (mg/L)	Cadmium (mg/L)	Chromium (mg/L)	Cobalt (mg/L)	Fluoride (mg/L)	Lead (mg/L)	Lithium (mg/L)	Mercury (mg/L)	Molybdenum (mg/L)	Selenium (mg/L)	Thallium (mg/L)	Radium Combined (pCi/L)
MW-101	02/27/18	<0.200	132	6.27	0.288	7.15	<5.00	534	<0.00200	0.00247	0.681	<0.00200	<0.00100	<0.0100	<0.0100	0.288	<0.00200	0.0362	<0.000200	<0.00500	<0.00200	<0.00200	0.177
MW-101	04/16/18	<0.200	135	5.99	0.387	6.93	<5.00	536	<0.00200	<0.00200	0.694	<0.00200	<0.00100	<0.0100	<0.0100	0.387	<0.00200	0.0369	<0.000200	<0.00500	<0.00200	<0.00200	0.870
MW-101	05/21/18	<0.200	134	6.52	0.300	7.39	<5.00	522	<0.00200	<0.00200	0.686	<0.00200	<0.00100	<0.0100	<0.0100	0.300	<0.00200	0.0381	<0.000200	<0.00500	<0.00200	<0.00200	0.894
MW-101	07/19/18	<0.200	132	6.18	0.297	7.05	<5.00	538	<0.00200	<0.00200	0.689	<0.00200	<0.00100	<0.0100	<0.0100	0.297	<0.00200	0.0339	<0.000200	<0.00500	<0.00200	<0.00200	1.82
MW-101	09/10/18	<0.200	135	6.12	0.392	7.07	<5.00	545	<0.00200	0.00462	0.630	<0.00200	<0.00100	<0.0100	<0.0100	0.392	<0.00200	0.0323	<0.000200	<0.00500	<0.00200	<0.00200	1.08
MW-101	10/30/18	<0.200	135	5.90	0.318	7.10	<5.00	526	<0.00200	<0.00200	0.678	<0.00200	<0.00100	<0.0100	<0.0100	0.318	<0.00200	0.0287	<0.000200	<0.00500	<0.00200	<0.00200	2.78
MW-101	12/20/18	<0.200	133	6.43	0.316	7.30	<5.00	509	<0.00200	0.00473	0.663	<0.00200	<0.00100	<0.0100	<0.0100	0.316	<0.00200	0.0324	<0.000200	<0.00500	<0.00200	<0.00200	1.16
MW-101	02/15/19	<0.200	130	5.92	0.318	7.78	<5.00	521	<0.00200	0.00412	0.637	<0.00200	<0.00100	<0.0100	<0.0100	0.318	<0.00200	0.0325	<0.000200	<0.00500	<0.00200	<0.00200	2.28
MW-101	04/29/19	<0.200	124	6.19	0.385	7.18	<5.00	536	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW-102	02/27/18	<0.200	130	5.08	0.209	7.11	<5.00	507	<0.00200	0.00461	0.695	<0.00200	<0.00100	<0.0100	<0.0100	0.209	<0.00200	0.0337	<0.000200	<0.00500	<0.00200	<0.00200	1.89
MW-102	04/16/18	<0.200	129	4.89	0.335	6.99	<5.00	492	<0.00200	<0.00200	0.806	<0.00200	<0.00100	<0.0100	<0.0100	0.335	<0.00200	0.0426	<0.000200	<0.00500	<0.00200	<0.00200	0.539
MW-102	05/21/18	<0.200	133	4.99	0.305	7.37	<5.00	506	<0.00200	<0.00200	0.731	<0.00200	<0.00100	<0.0100	<0.0100	0.305	<0.00200	0.0384	<0.000200	<0.00500	<0.00200	<0.00200	1.54
MW-102	07/19/18	<0.200	129	5.10	0.229	7.07	<5.00	506	<0.00200	0.00246	0.729	<0.00200	<0.00100	<0.0100	<0.0100	0.229	<0.00200	0.0363	<0.000200	<0.00500	<0.00200	<0.00200	0.316
MW-102	09/10/18	<0.200	135	5.26	0.300	7.10	<5.00	526	<0.00200	<0.00200	0.726	<0.00200	<0.00100	<0.0100	<0.0100	0.300	<0.00200	0.0336	<0.000200	<0.00500	<0.00200	<0.00200	2.12
MW-102	10/30/18	<0.200	139	4.95	0.244	7.15	<5.00	516	<0.00200	0.01500	0.681	<0.00200	<0.00100	<0.0100	<0.0100	0.244	<0.00200	0.0290	<0.000200	<0.00500	<0.00200	<0.00200	3.69
MW-102	12/20/18	<0.200	141	5.65	0.23	7.35	<5.00	474	<0.00200	0.0347	0.627	<0.00200	<0.00100	<0.0100	<0.0100	0.230	<0.00200	0.0300	<0.000200	<0.00500	<0.00200	<0.00200	1.82
MW-102	02/14/19	<0.200	131	5.11	0.257	7.59	<5.00	509	<0.00200	0.0242	0.645	<0.00200	<0.00100	<0.0100	<0.0100	0.257	<0.00200	0.0336	<0.000200	<0.00500	<0.00200	<0.00200	1.28
MW-102	04/29/19	<0.200	125	5.29	0.280	7.11	<5.00	477	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW-103	02/28/18	<0.200	136	4.20	0.197	7.24	<5.00	493	<0.00200	<0.00200	0.674	<0.00200	<0.00100	<0.0100	<0.0100	0.197	<0.00200	0.0536	<0.000200	<0.00500	<0.00200	<0.00200	1.80
MW-103	04/16/18	<0.200	155	4.03	0.306	6.96	<5.00	549	<0.00200	<0.00200	0.739	<0.00200	<0.00100	<0.0100	<0.0100	0.306	<0.00200	0.0565	<0.000200	<0.00500	<0.00200	<0.00200	1.68
MW-103	05/21/18	<0.200	177	4.08	0.277	7.24	<5.00	619	<0.00200	<0.00200	0.739	<0.00200	<0.00100	<0.0100	<0.0100	0.277	<0.00200	0.0605	<0.000200	<0.00500	<0.00200	<0.00200	1.19
MW-103	07/19/18	<0.200	162	4.36	0.210	7.39	<5.00	535	<0.00200	<0.00200	0.765	<0.00200	<0.00100	<0.0100	<0.0100	0.210	<0.00200	0.0536	<0.000200	<0.00500	<0.00200	<0.00200	3.53
MW-103	09/11/18	<0.200	149	4.54	0.273	7.02	<5.00	528	<0.00200	<0.00200	0.703	<0.00200	<0.00100	<0.0100	<0.0100	0.273	<0.00200	0.0513	<0.000200	<0.00500	<0.00200	<0.00200	1.27
MW-103	10/30/18	<0.200	137	4.42	0.219	7.16	<5.00	477	<0.00200	<0.00200	0.668	<0.00200	<0.00100	<0.0100	<0.0100	0.219	<0.00200	0.0448	<0.000200	<0.00500	<0.00200	<0.00200	1.97
MW-103	12/20/18	<0.200	140	4.32	0.209	7.27	<5.00	465	<0.00200	<0.00200	0.681	<0.00200	<0.00100	<0.0100	<0.0100	0.209	<0.00200	0.0452	<0.000200	<0.00500	<0.00200	<0.00200	1.67
MW-103	02/14/19	<0.200	135	4.00	0.231	7.04	<5.00	491	<0.00200	<0.00200	0.687	<0.00200	<0.00100	<0.0100	<0.0100	0.231	<0.00200	0.0509	<0.000200	<0.00500	<0.00200	<0.00200	3.00
MW-103	04/29/19	<0.200	137	4.51	0.257	7.15	<5.00	485	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW-104	02/28/18	1.28	51.8	23.5	0.470	7.50	130	444	<0.00200	<0.00200	0.181	<0.00200	<0.00100	<0.0100	<0.0100	0.470	<0.00200	0.0160	<0.000200	0.0226	<0.00200	<0.00200	0.698
MW-104	04/16/18	1.27	50.2	23.0	0.674	7.29	136	433	<0.00200	<0.00200	0.161	<0.00200	<0.00100	<0.0100	<0.0100	0.674	<0.00200	0.0203	<0.000200	0.0229	<0.00200	<0.00200	0.368
MW-104	05/21/18	1.26	50.9	23.6	0.628	7.64	138	425	<0.00200	<0.00200	0.162	<0.00200	<0.00100	<0.0100	<0.0100	0.628	<0.00200	0.0164	<0.000200	0.0251	<0.00200	<0.00200	0.942
MW-104	07/19/18	1.31	53.0	21.9	0.510	7.86	147	455	<0.00200	<0.00200	0.152	<0.00200	<0.00100	<0.0100	<0.0100	0.510	<0.00200	0.0156	<0.000200	0.0288	<0.00200	<0.00200	0.396
MW-104	09/11/18	1.34	49.5	21.6	0.670	7.45	139	450	<0.00200	<0.00200	0.162	<0.00200	<0.00100	<0.0100	<0.0100	0.670	<0.00200	0.0161	<0.000200	0.0280	<0.00200	<0.00200	0.506
MW-104	10/30/18	1.26	47.8	20.5	0.598	7.45	109	417	<0.00200	<0.00200	0.163	<0.00200	<0.00100	<0.0100	<0.0100	0.598	<0.00200	<0.0150	<0.000200	0.0249	<0.00200	<0.00200	1.67
MW-104	12/20/18	1.31	51.5	21.4	0.453	7.62	116	393	<0.00200	<0.00200	0.165	<0.00200	<0.00100	<0.0100	<0.0100	0.453	<0.00200	0.0159	<0.000200	0.0225	<0.00200	<0.00200	1.72
MW-104	02/14/19	1.32	50.5	23.6	0.537	7.30	115	421	<0.00200	<0.00200	0.163	<0.00200	<0.00100	<0.0100	<0.0100	0.537	<0.00200	<0.0150	<0.000200	0.0220	<0.00200	<0.00200	0.953
MW-104	04/29/19	1.20	52.6	23.0	0.593	7.56	119	397	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

mg/L - miligrams per liter
pCi/L - picocuries per liter
S.U. - Standard Units
--- Not Sampled
* Verification Sample
** Extra Sample Collected per Standard Sampling Procedure

Table 1
Ash Impoundment
Appendix III and Appendix IV Detection Monitoring Results
KCP&L Iatan Generating Station

		Appendix III Constituents							Appendix IV Constituents														
Well Number	Sample Date	Boron (mg/L)	Calcium (mg/L)	Chloride (mg/L)	Fluoride (mg/L)	pH (S.U.)	Sulfate (mg/L)	Total Dissolved Solids (mg/L)	Antimony (mg/L)	Arsenic (mg/L)	Barium (mg/L)	Beryllium (mg/L)	Cadmium (mg/L)	Chromium (mg/L)	Cobalt (mg/L)	Fluoride (mg/L)	Lead (mg/L)	Lithium (mg/L)	Mercury (mg/L)	Molybdenum (mg/L)	Selenium (mg/L)	Thallium (mg/L)	Radium Combined (pCi/L)
MW-105	02/28/18	1.26	101	18.5	0.654	7.05	282	689	<0.00200	<0.00200	0.402	<0.00200	<0.00100	<0.0100	<0.0100	0.654	<0.00200	0.0287	<0.000200	0.0148	<0.00200	<0.00200	0.772
MW-105	04/16/18	1.26	99.5	19.0	0.837	7.23	292	677	<0.00200	<0.00200	0.377	<0.00200	<0.00100	<0.0100	<0.0100	0.837	<0.00200	0.0362	<0.000200	0.0167	<0.00200	<0.00200	0.539
MW-105	05/21/18	1.26	102	18.6	0.791	7.39	286	713	<0.00200	<0.00200	0.369	<0.00200	<0.00100	<0.0100	<0.0100	0.791	<0.00200	0.0339	<0.000200	0.0151	<0.00200	<0.00200	0.884
MW-105	07/19/18	1.19	94.3	18.4	0.637	7.58	267	684	<0.00200	<0.00200	0.374	<0.00200	<0.00100	<0.0100	<0.0100	0.637	<0.00200	0.0304	<0.000200	0.0155	<0.00200	<0.00200	0.895
MW-105	09/11/18	1.33	97.1	18.3	0.808	7.23	255	676	<0.00200	<0.00200	0.380	<0.00200	<0.00100	<0.0100	<0.0100	0.808	<0.00200	0.0269	<0.000200	0.0196	<0.00200	<0.00200	2.05
MW-105	10/30/18	1.68	94.7	17.9	0.744	7.30	250	668	<0.00200	<0.00200	0.358	<0.00200	<0.00100	<0.0100	<0.0100	0.744	<0.00200	0.0232	<0.000200	0.0340	<0.00200	<0.00200	1.98
MW-105	12/19/18	1.92	93.5	18.2	0.595	7.37	248	679	<0.00200	<0.00200	0.370	<0.00200	<0.00100	<0.0100	<0.0100	0.595	<0.00200	0.0248	<0.000200	0.0352	<0.00200	<0.00200	1.68
MW-105	02/14/19	1.26	93.4	17.5	0.690	7.76	262	704	<0.00200	<0.00200	0.374	<0.00200	<0.00100	<0.0100	<0.0100	0.690	<0.00200	0.0273	<0.000200	0.0194	<0.00200	<0.00200	0.434
MW-105	04/29/19	1.41	89.4	17.8	0.791	7.41	281	647	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW-106	02/28/18	1.16	86.1	21.0	0.346	6.89	154	572	<0.00200	<0.00200	0.217	<0.00200	<0.00100	<0.0100	<0.0100	0.346	<0.00200	0.0373	<0.000200	<0.00500	<0.00200	<0.00200	1.21
MW-106	04/16/18	1.10	83.8	20.8	0.503	7.25	156	545	<0.00200	<0.00200	0.204	<0.00200	<0.00100	<0.0100	<0.0100	0.503	<0.00200	0.0392	<0.000200	<0.00500	<0.00200	<0.00200	1.08
MW-106	05/21/18	1.08	87.7	19.0	0.444	7.11	135	540	<0.00200	<0.00200	0.198	<0.00200	<0.00100	<0.0100	<0.0100	0.444	<0.00200	0.0411	<0.000200	<0.00500	<0.00200	<0.00200	0.0319
MW-106	07/19/18	1.00	95.3	18.3	0.336	7.69	157	585	<0.00200	<0.00200	0.205	<0.00200	<0.00100	<0.0100	<0.0100	0.336	<0.00200	0.0395	<0.000200	<0.00500	<0.00200	<0.00200	1.42
MW-106	09/11/18	0.937	110	20.3	0.721	7.11	185	629	<0.00200	<0.00200	0.232	<0.00200	<0.00100	<0.0100	<0.0100	0.721	<0.00200	0.0389	<0.000200	<0.00500	<0.00200	<0.00200	0.769
MW-106	10/29/18	0.870	121	18.9	0.349	7.11	230	677	<0.00200	<0.00200	0.255	<0.00200	<0.00100	<0.0100	<0.0100	0.349	<0.00200	0.0350	<0.000200	<0.00500	<0.00200	<0.00200	1.61
MW-106	12/19/18	0.950	105	19.7	0.280	7.05	186	612	<0.00200	<0.00200	0.242	<0.00200	<0.00100	<0.0100	<0.0100	0.280	<0.00200	0.0343	<0.000200	<0.00500	<0.00200	<0.00200	0.551
MW-106	02/14/19	1.07	113	21.0	0.364	7.64	209	705	<0.00200	<0.00200	0.276	<0.00200	<0.00100	<0.0100	<0.0100	0.364	<0.00200	0.0371	<0.000200	<0.00500	<0.00200	<0.00200	0.282
MW-106	04/29/19	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW-107	02/28/18	2.44	60.0	18.5	0.494	7.94	264	683	<0.00200	<0.00200	0.112	<0.00200	<0.00100	<0.0100	<0.0100	0.494	<0.00200	<0.0150	<0.000200	0.0979	<0.00200	<0.00200	0.754
MW-107	04/16/18	2.57	54.8	19.7	0.790	7.76	233	637	<0.00200	<0.00200	0.102	<0.00200	<0.00100	<0.0100	<0.0100	0.790	<0.00200	<0.0150	<0.000200	0.110	<0.00200	<0.00200	1.56
MW-107	05/21/18	2.39	57.5	20.6	0.779	7.54	222	628	<0.00200	<0.00200	0.0994	<0.00200	<0.00100	<0.0100	<0.0100	0.779	<0.00200	<0.0150	<0.000200	0.103	<0.00200	<0.00200	0.190
MW-107	07/19/18	2.33	57.6	20.1	0.604	7.58	235	634	<0.00200	<0.00200	0.0995	<0.00200	<0.00100	<0.0100	<0.0100	0.604	<0.00200	<0.0150	<0.000200	0.102	<0.00200	<0.00200	0.221
MW-107	09/11/18	2.30	52.7	19.0	0.416	7.51	225	639	<0.00200	<0.00200	0.0991	<0.00200	<0.00100	<0.0100	<0.0100	0.416	<0.00200	<0.0150	<0.000200	0.0897	<0.00200	<0.00200	0.144
MW-107	10/29/18	2.11	52.3	20.2	0.667	7.47	239	647	<0.00200	<0.00200	0.103	<0.00200	<0.00100	<0.0100	<0.0100	0.667	<0.00200	<0.0150	<0.000200	0.0915	<0.00200	<0.00200	1.02
MW-107	12/20/18	2.02	55.8	20.2	0.532	7.75	255	583	<0.00200	<0.00200	0.105	<0.00200	<0.00100	<0.0100	<0.0100	0.532	<0.00200	<0.0150	<0.000200	0.0703	<0.00200	<0.00200	1.64
MW-107	02/15/19	1.87	60.8	25.9	0.652	7.35	266	679	<0.00200	<0.00200	0.116	<0.00200	<0.00100	<0.0100	<0.0100	0.652	<0.00200	<0.0150	<0.000200	0.0711	<0.00200	<0.00200	0.309
MW-107	04/29/19	2.20	67.4	33.3	0.744	7.39	249	619	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW-107	05/20/19	---	*66.8	*34.2	---	**7.49	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW-108	02/28/18	1.36	144	16.5	0.394	7.38	292	791	<0.00200	<0.00200	0.202	<0.00200	<0.00100	<0.0100	<0.0100	0.394	<0.00200	0.0330	<0.000200	0.0131	<0.00200	<0.00200	1.59
MW-108	04/16/18	1.82	113	16.0	0.668	7.59	283	761	<0.00200	0.00251	0.197	<0.00200	<0.00100	<0.0100	<0.0100	0.668	<0.00200	0.0338	<0.000200	0.0147	<0.00200	<0.00200	1.55
MW-108	05/21/18	1.68	125	16.4	0.605	7.79	278	743	<0.00200	0.00226	0.204	<0.00200	<0.00100	<0.0100	<0.0100	0.605	<0.00200	0.0376	<0.000200	0.0126	<0.00200	<0.00200	0.585
MW-108	07/19/18	1.21	131	16.7	0.425	7.21	304	796	<0.00200	0.00204	0.171	<0.00200	<0.00100	<0.0100	<0.0100	0.425	<0.00200	0.0346	<0.000200	0.0112	<0.00200	<0.00200	1.14
MW-108	09/10/18	0.885	147	17.5	0.480	7.14	303	805	<0.00200	<0.00200	0.175	<0.00200	<0.00100	<0.0100	<0.0100	0.480	<0.00200	0.0340	<0.000200	0.00776	<0.00200	<0.00200	1.00
MW-108	10/29/18	1.39	157	18.9	0.530	7.23	374	906	<0.00200	0.00288	0.235	<0.00200	<0.00100	<0.0100	<0.0100	0.530	<0.00200	0.0310	<0.000200	0.0110	<0.00200	<0.00200	0.447
MW-108	12/19/18	1.40	255	28.7	0.327	7.31	666	1490	<0.00200	0.00302	0.283	<0.00200	<0.00100	<0.0100	<0.0100	0.327	<0.00200	0.0450	<0.000200	0.00944	<0.00200	<0.00200	0.488
MW-108	02/15/19	1.50	127	18.8	0.482	8.40	303	835	<0.00200	0.00211	0.153	<0.00200	<0.00100	<0.0100	<0.0100	0.482	<0.00200	0.0353	<0.000200	0.0118	<0.00200	<0.00200	0.470
MW-108	04/29/19	1.41	128	18.7	0.559	7.32	336	799	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

mg/L - miligrams per liter
pCi/L - picocuries per liter
S.U. - Standard Units
--- Not Sampled
* Verification Sample
** Extra Sample Collected per Standard Sampling Procedure

Table 1
Ash Impoundment
Appendix III and Appendix IV Detection Monitoring Results
KCP&L Iatan Generating Station

		Appendix III Constituents							Appendix IV Constituents														
Well Number	Sample Date	Boron (mg/L)	Calcium (mg/L)	Chloride (mg/L)	Fluoride (mg/L)	pH (S.U.)	Sulfate (mg/L)	Total Dissolved Solids (mg/L)	Antimony (mg/L)	Arsenic (mg/L)	Barium (mg/L)	Beryllium (mg/L)	Cadmium (mg/L)	Chromium (mg/L)	Cobalt (mg/L)	Fluoride (mg/L)	Lead (mg/L)	Lithium (mg/L)	Mercury (mg/L)	Molybdenum (mg/L)	Selenium (mg/L)	Thallium (mg/L)	Radium Combined (pCi/L)
MW-109	02/27/18	0.790	93.9	25.2	0.461	7.32	222	641	<0.00200	<0.00200	0.207	<0.00200	<0.00100	<0.0100	<0.0100	0.461	<0.00200	0.0234	<0.000200	0.0255	<0.00200	<0.00200	0.416
MW-109	04/16/18	0.664	117	23.1	0.600	7.50	233	700	<0.00200	<0.00200	0.282	<0.00200	<0.00100	<0.0100	<0.0100	0.600	<0.00200	0.0347	<0.000200	0.0205	<0.00200	<0.00200	1.67
MW-109	05/21/18	0.630	110	25.7	0.580	7.53	200	663	<0.00200	0.00219	0.296	<0.00200	<0.00100	<0.0100	<0.0100	0.580	<0.00200	0.0306	<0.000200	0.0179	<0.00200	<0.00200	0.280
MW-109	07/19/18	0.569	104	27.7	0.470	7.19	203	653	<0.00200	0.00334	0.244	<0.00200	<0.00100	<0.0100	<0.0100	0.470	<0.00200	0.0263	<0.000200	0.0163	<0.00200	<0.00200	1.88
MW-109	09/10/18	0.565	127	27.2	0.601	7.07	193	739	<0.00200	0.00351	0.303	<0.00200	<0.00100	<0.0100	<0.0100	0.601	<0.00200	0.0258	<0.000200	0.0130	<0.00200	<0.00200	1.19
MW-109	10/29/18	0.566	130	27.1	0.557	7.20	186	708	<0.00200	0.00487	0.315	<0.00200	<0.00100	<0.0100	<0.0100	0.557	<0.00200	0.0235	<0.000200	0.0119	<0.00200	<0.00200	1.34
MW-109	12/19/18	0.664	91.5	26.5	0.445	7.31	193	584	<0.00200	<0.00200	0.208	<0.00200	<0.00100	<0.0100	<0.0100	0.445	<0.00200	0.0190	<0.000200	0.0198	<0.00200	<0.00200	0.480
MW-109	02/15/19	0.772	111	21.2	0.517	7.24	249	711	<0.00200	<0.00200	0.246	<0.00200	<0.00100	<0.0100	<0.0100	0.517	<0.00200	0.0281	<0.000200	0.0203	<0.00200	<0.00200	0.765
MW-109	04/29/19	0.684	126	22.5	0.604	7.22	245	692	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW-110	02/27/18	1.85	55.7	20.7	0.489	7.52	352	733	<0.00200	<0.00200	0.115	<0.00200	<0.00100	<0.0100	<0.0100	0.489	<0.00200	0.0195	<0.000200	0.0701	<0.00200	<0.00200	0.930
MW-110	04/16/18	2.30	57.7	20.0	0.648	7.87	353	703	<0.00200	0.00444	0.173	<0.00200	<0.00100	<0.0100	<0.0100	0.648	<0.00200	0.0175	<0.000200	0.0887	<0.00200	<0.00200	0.351
MW-110	05/21/18	2.17	62.0	21.0	0.621	7.83	690	728	<0.00200	<0.00200	0.125	<0.00200	<0.00100	<0.0100	<0.0100	0.621	<0.00200	0.0217	<0.000200	0.0767	<0.00200	<0.00200	0.139
MW-110	07/19/18	1.90	62.5	20.4	0.457	7.50	343	715	<0.00200	<0.00200	0.110	<0.00200	<0.00100	<0.0100	<0.0100	0.457	<0.00200	0.0191	<0.000200	0.0622	<0.00200	<0.00200	0.59
MW-110	09/10/18	0.888	87.1	11.8	0.628	7.25	67.4	572	<0.00200	<0.00200	0.374	<0.00200	<0.00100	<0.0100	<0.0100	0.628	<0.00200	0.0257	<0.000200	0.0132	<0.00200	<0.00200	1.59
MW-110	10/30/18	2.31	58.6	20.1	0.470	7.31	346	752	<0.00200	0.00464	0.130	<0.00200	<0.00100	<0.0100	<0.0100	0.470	<0.00200	<0.0150	<0.000200	0.0829	<0.00200	<0.00200	0.81
MW-110	12/19/18	2.35	67.6	20.3	0.374	7.65	348	751	<0.00200	0.00365	0.133	<0.00200	<0.00100	<0.0100	<0.0100	0.374	<0.00200	<0.0150	<0.000200	0.0675	<0.00200	<0.00200	0.772
MW-110	02/15/19	2.40	64.4	20.7	0.461	7.41	345	727	<0.00200	0.00235	0.119	<0.00200	<0.00100	<0.0100	<0.0100	0.461	<0.00200	<0.0150	<0.000200	0.0884	<0.00200	<0.00200	0.983
MW-110	04/29/19	2.45	64.1	20.5	0.551	7.51	361	776	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW-111	02/27/18	1.03	83.0	11.3	0.661	7.24	71.4	569	<0.00200	<0.00200	0.344	<0.00200	<0.00100	<0.0100	<0.0100	0.661	<0.00200	0.0311	<0.000200	0.0153	<0.00200	<0.00200	0.472
MW-111	04/16/18	0.846	101	7.71	0.608	7.42	31.3	554	<0.00200	0.00215	0.441	<0.00200	<0.00100	<0.0100	<0.0100	0.608	<0.00200	0.0331	<0.000200	0.0139	<0.00200	<0.00200	0.252
MW-111	05/21/18	0.904	91.5	9.92	0.646	7.53	64.7	580	<0.00200	<0.00200	0.410	<0.00200	<0.00100	<0.0100	<0.0100	0.646	<0.00200	0.0302	<0.000200	0.0155	<0.00200	<0.00200	0.489
MW-111	07/19/18	0.897	84.5	11.0	0.488	7.22	73.1	555	<0.00200	<0.00200	0.370	<0.00200	<0.00100	<0.0100	<0.0100	0.488	<0.00200	0.0270	<0.000200	0.0149	<0.00200	<0.00200	1.21
MW-111	09/10/18	0.873	87.2	11.8	0.62	7.25	66.8	552	<0.00200	<0.00200	0.373	<0.00200	0.0733	<0.0100	<0.0100	0.620	<0.00200	0.0230	<0.000200	0.0140	<0.00200	<0.00200	2.58
MW-111	10/30/18	0.863	98.7	9.29	0.525	7.45	62.8	586	<0.00200	<0.00200	0.391	<0.00200	<0.00100	<0.0100	<0.0100	0.525	<0.00200	0.0249	<0.000200	0.0124	<0.00200	<0.00200	2.29
MW-111	12/19/18	0.909	96.1	9.63	0.422	7.38	61.8	572	<0.00200	<0.00200	0.386	<0.00200	<0.00100	<0.0100	<0.0100	0.422	<0.00200	0.0235	<0.000200	0.0124	<0.00200	<0.00200	1.13
MW-111	02/15/19	0.908	99.0	8.19	0.513	7.20	27.8	567	<0.00200	0.00370	0.454	<0.00200	<0.00100	<0.0100	<0.0100	0.513	<0.00200	0.0270	<0.000200	0.0127	<0.00200	<0.00200	1.18
MW-111	04/29/19	0.843	95.9	8.30	0.574	7.32	26.3	559	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

mg/L - miligrams per liter
pCi/L - picocuries per liter
S.U. - Standard Units
--- Not Sampled

Table 2
Ash Impoundment
Detection Monitoring Field Measurements
KCP&L Iatan Generating Station

Well Number	Sample Date	pH (S.U.)	Specific Conductivity (µS)	Temperature (°C)	Turbidity (NTU)	ORP (mV)	DO (mg/L)	Water Level (ft btoc)	Groundwater Elevation (ft NGVD)
MW-101	02/27/18	7.15	841	14.9	39.3	NA	NA	12.35	764.84
MW-101	04/16/18	6.93	961	12.45	0.8	-109.0	0.00	11.18	766.01
MW-101	05/21/18	7.39	905	14.71	0.0	-175.0	0.98	10.35	766.84
MW-101	07/19/18	7.05	962	15.7	0.0	-181.0	2.76	8.78	768.41
MW-101	09/10/18	7.07	943	15.21	4.2	-164.0	0.00	8.31	768.88
MW-101	10/30/18	7.10	992	14.77	0.0	-134.0	0.00	6.42	770.77
MW-101	12/20/18	7.30	976	12.5	5.0	-147	1.29	6.95	770.24
MW-101	02/15/19	7.78	955	11.62	0	-184	0.00	7.48	769.71
MW-101	04/29/19	7.18	981	11.59	0.0	-199.0	0.0	4.52	772.67
MW-102	02/27/18	7.11	784	15.75	4.9	NA	NA	10.97	764.82
MW-102	04/16/18	6.99	882	12.58	0.0	-84.0	0.00	9.68	766.11
MW-102	05/21/18	7.37	881	14.47	0.0	-175.0	0.99	9.07	766.72
MW-102	07/19/18	7.07	934	15.59	0	-190	2.11	7.54	768.25
MW-102	09/10/18	7.10	890	15.44	6.4	-162.0	0.00	7.10	768.69
MW-102	10/30/18	7.15	992	14.46	0.0	-129.0	0.00	6.20	769.59
MW-102	12/20/18	7.35	1030	9.89	25.8	-154	0.39	5.50	770.29
MW-102	02/14/19	7.59	929	12.22	0.0	-167	0.60	5.65	770.14
MW-102	04/29/19	7.11	924	11.2	0.0	-205.0	0.0	2.96	772.83
MW-103	02/28/18	7.24	1290	15.14	11.1	NA	NA	19.17	764.02
MW-103	04/16/18	6.96	992	13.35	0.0	-82.0	0.00	17.29	765.90
MW-103	05/21/18	7.24	1050	15.96	0.0	-165.0	0.67	16.83	766.36
MW-103	07/19/18	7.39	1090	16.87	0.0	-194.0	0.27	15.58	767.61
MW-103	09/11/18	7.02	887	15.91	6.6	-144.0	0.00	14.96	768.23
MW-103	10/30/18	7.16	923	14.35	0.0	-119.0	0.00	12.70	770.49
MW-103	12/20/18	7.27	928	12.6	5.0	-142	0.00	12.70	770.49
MW-103	02/14/19	7.04	834	13.76	0.0	-169	0.00	13.03	770.16
MW-103	04/29/19	7.15	912	14.85	0.0	-148.0	8.3	9.59	773.60
MW-104	02/28/18	7.50	1060	15.2	4.3	NA	NA	16.11	763.01
MW-104	04/16/18	7.29	698	14.5	0.3	-80.0	0.00	13.39	765.73
MW-104	05/21/18	7.64	655	16.23	0.0	-185.0	0.70	12.88	766.24
MW-104	07/19/18	7.86	749	16.5	0.0	-255.0	0.01	11.33	767.79
MW-104	09/11/18	7.45	690	16.2	6.9	-173.0	0.01	10.59	768.53
MW-104	10/30/18	7.45	720	14.29	3.1	-144.0	0.00	8.51	770.61
MW-104	12/20/18	7.62	713	12.90	5.5	-165	0.00	8.81	770.31
MW-104	02/14/19	7.30	667	13.74	0.0	-190	0.00	9.40	769.72
MW-104	04/29/19	7.56	701	14.98	4.0	-170.0	0.0	5.75	773.37
MW-105	02/28/18	7.05	1560	15.02	8.9	NA	NA	16.28	763.87
MW-105	04/16/18	7.23	1050	13.68	0.0	-59.0	0.00	15.15	765.00
MW-105	05/21/18	7.39	1200	16.19	0.0	-166.0	1.02	13.83	766.32
MW-105	07/19/18	7.58	940	15.78	0.0	-267.0	0.00	11.44	768.71
MW-105	09/11/18	7.23	993	15.37	6.8	-159.0	0.02	10.50	769.65
MW-105	10/30/18	7.30	1060	14.26	7.2	-140.0	0.00	9.00	771.15
MW-105	12/19/18	7.37	1070	12.95	0.8	-134	0.00	10.00	770.15
MW-105	02/14/19	7.76	1060	12.92	0.0	-202	0.00	11.16	768.99
MW-105	04/29/19	7.41	1090	13.59	0.0	-180.0	0.0	7.37	772.78
MW-106	02/28/18	6.89	1350	15.09	41.0	NA	NA	23.77	763.29
MW-106	04/16/18	7.25	887	14.24	1.4	-70.0	0.00	22.57	764.49
MW-106	05/21/18	7.11	914	16.76	0.0	202.0	0.64	20.50	766.56
MW-106	07/19/18	7.69	949	17.35	0.0	-273.0	0.00	17.67	769.39
MW-106	09/11/18	7.11	959	16.6	7.3	-158.0	0.21	16.43	770.63
MW-106	10/29/18	7.11	1110	16.32	0.7	-136.0	0.00	16.02	771.04
MW-106	12/19/18	7.05	1020	14.35	0.0	-125	1.77	18.34	768.72
MW-106	02/14/19	7.64	1080	14.19	0.0	-195	0.00	20.10	766.96
MW-106	04/29/19	NA	NA	NA	NA	NA	NA	NA	NA
MW-107	02/28/18	7.94	1610	12.8	1.1	NA	NA	15.87	762.24
MW-107	04/16/18	7.76	983	13.49	0.0	-34.0	0.00	13.60	764.51
MW-107	05/21/18	7.54	976	14.63	0.0	-172.0	1.07	11.10	767.01
MW-107	07/19/18	7.58	1010	15.81	0.0	-283.0	0.55	8.23	769.88
MW-107	09/11/18	7.51	948	15.52	6.3	-163.0	0.07	6.08	772.03
MW-107	10/29/18	7.47	1010	15.71	0.0	-160.0	0.00	7.21	770.90
MW-107	12/20/18	7.75	1050	12.57	4.9	-151	0.00	10.64	767.47
MW-107	02/15/19	7.35	1020	12.78	0.0	-175	0.00	12.46	765.65
MW-107	04/29/19	7.39	1080	12.68	0.0	-188.0	0.0	5.94	772.17
MW-107	05/20/19	**7.49	1010	12.13	0.0	-195.0	0.0	4.84	773.27
MW-108	02/28/18	7.38	1030	11.6	23.1	NA	NA	15.05	762.53
MW-108	04/16/18	7.59	1200	12.04	6.4	-91.0	0.00	12.98	764.60
MW-108	05/21/18	7.79	1150	12.59	0.0	-176.0	1.10	10.50	767.08
MW-108	07/19/18	7.21	1110	14.67	0.0	-169.0	3.06	7.72	769.86
MW-108	09/10/18	7.14	1210	13.09	6.8	-155.0	0.00	6.50	771.08
MW-108	10/29/18	7.23	1380	14.07	2.3	-147.0	0.00	6.45	771.13
MW-108	12/19/18	7.31	1870	11.63	5.0	-121	0.00	9.51	768.07
MW-108	02/15/19	8.40	1270	9.78	4.5	-182	7.92	11.28	766.30
MW-108	04/29/19	7.32	1310	9.77	0.0	-190.0	0.0	5.18	772.40
MW-109	02/27/18	7.32	887	14.92	46.7	NA	NA	15.50	762.33
MW-109	04/16/18	7.50	1130	14.25	24.0	-42.0	0.00	13.16	764.67
MW-109	05/21/18	7.53	1020	15.01	81.0	-156.0	0.88	10.75	767.08
MW-109	07/19/18	7.19	1010	17.48	0.0	-175.0	3.12	8.08	769.75
MW-109	09/10/18	7.07	1170	15.9	5.7	-150.0	0.21	6.97	770.86
MW-109	10/29/18	7.20	1120	16.38	7.6	-143.0	0.00	6.69	771.14
MW-109	12/19/18	7.36	983	13.43	5.9	-63	0.00	9.50	768.33
MW-109	02/15/19	7.24	1050	12.74	0.0	-173	0.00	11.29	766.54
MW-109	04/29/19	7.22	1190	12.61	0.0	-179.0	0.0	5.36	772.47
MW-110	02/27/18	7.52	955	12.2	36.7	NA	NA	15.65	762.57
MW-110	04/16/18	7.87	1110	10.35	13.6	-67.0	0.00	13.10	765.12
MW-110	05/21/18	7.83	1070	11.57	0.0	-177.0	3.02	11.43	766.79
MW-110	07/19/18	7.50	1090	13.36	0.0	-180.0	1.78	9.41	768.81
MW-110	09/10/18	7.25	912	16.05	0.0	-169.0	0.00	10.39	767.83
MW-110	10/30/18	7.31	1150	12.02	9.4	-80.0	0.00	7.51	770.71
MW-110	12/19/18	7.65	1180	10.43	4.2	-128	0.00	8.58	769.64
MW-110	02/15/19	7.41	1090	8.66	0.0	-174	0.00	9.95	768.27
MW-110	04/29/19	7.51	1200	8.45	0.0	-180.0	0.0	5.61	772.61
MW-111	02/27/18	7.24	803	15.64	19.3	NA	NA	15.72	763.04
MW-111	04/16/18	7.42	941	13.78	6.9	-57.0	0.00	12.28	766.48
MW-111	05/21/18	7.53	925	15.21	10.0	-178.0	1.16	12.22	766.54
MW-111	07/19/18	7.22	921	17.24	0.0	-183.0	2.72	11.04	767.72
MW-111	09/10/18	7.25	894	16.42	6.7	-157.0	0.75	10.39	768.37
MW-111	10/30/18	7.45	994	14.85	8.6	-133.0	0.00	8.46	770.30
MW-111	12/19/18	7.38	1000	13.53	6.8	-146	0.00	8.49	770.27
MW-111	02/15/19	7.20	937	12.61	9.9	-176	0.00	9.15	769.61
MW-111	04/29/19	7.32	993	12.17	0.0	-194.0	0.0	5.76	773.00

* Verification Sample
** Extra Sample Collected per Standard Sampling Procedure
S.U. - Standard Units
µS - microsiemens
°C - Degrees Celsius
ft btoc - Feet Below Top of Casing
ft NGVD - National Geodetic Vertical Datum (NAVD 88)
NTU - Nephelometric Turbidity Unit